

Leica

PHOTOGRAPHY





Leica

PHOTOGRAPHY®

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COVER

Bill Anderson

On a visit to Paris, the last one to photograph the Eiffel Tower is a rotten egg. Everyone does. But not everyone takes advantage of the fact that it is most dramatic by floodlight. Bill Anderson did, with the happy result shown. Leica IIIf, 35mm Summaron, f/8, about 15 seconds, Daylight Kodachrome II.

◀ INSIDE COVER

Jo Moore

This somewhat atypical modern artist with a typical modern artist's regard for his audience was pictured as part of a feature page assignment for the Mason City (Ia.) Globe-Gazette where Miss Moore is a staff photographer. IIIf, 90mm lens, Tri-X in existing light, 1/60th at f/5.6.

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The editors are happy to consider original articles on photography with the Leica and photographs taken with Leica cameras and lenses. All manuscripts and photographs should be accompanied by stamped, self-addressed return labels.



show place

BILL TROY / photojournalist

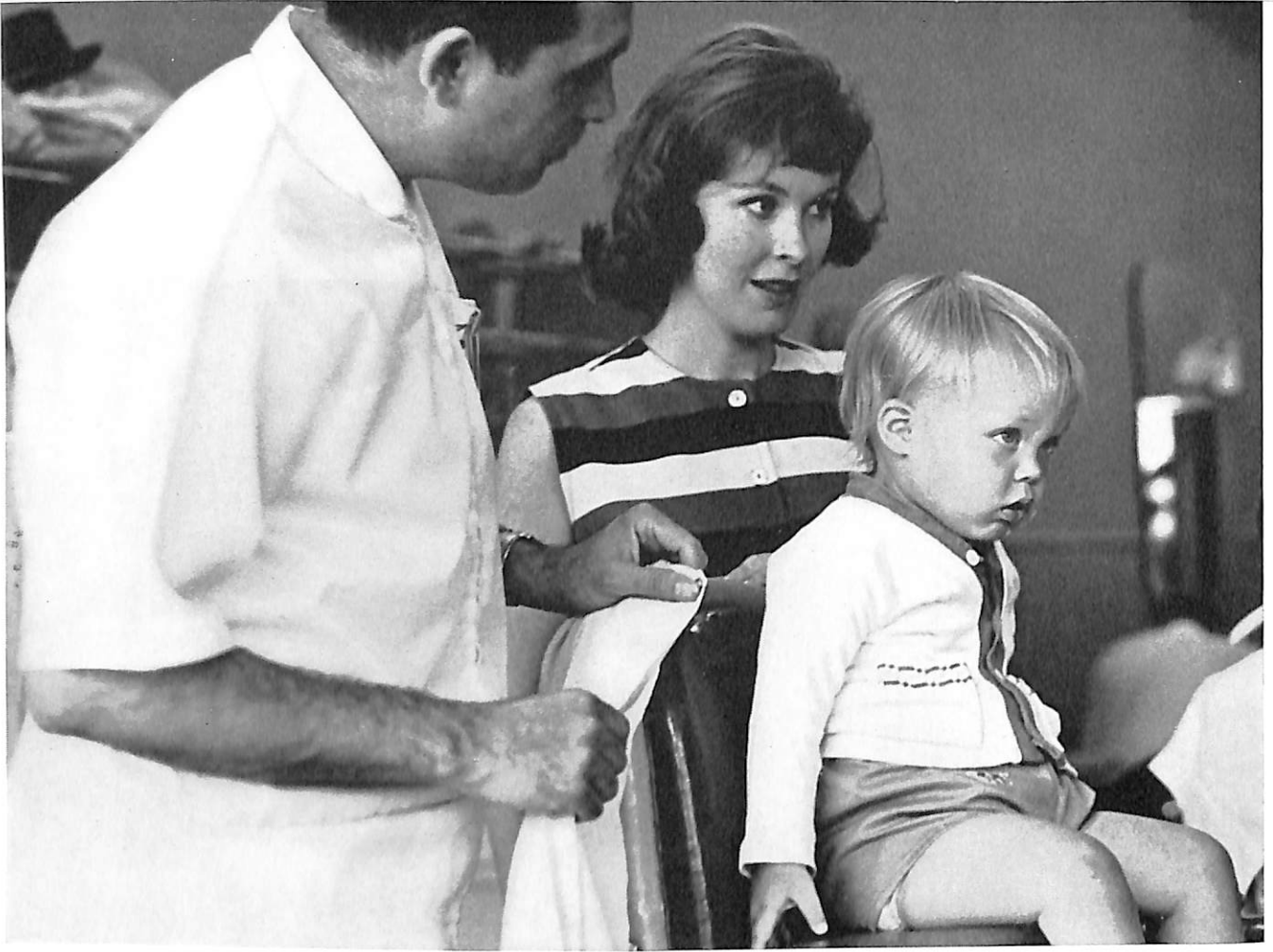
Bill Troy is a young New York photojournalist. His essay on his son's first haircut provides a direct but unpremeditated answer to the hobbyists' long-standing question, "Where will I find picture material?" Here is a situation just made for photography and

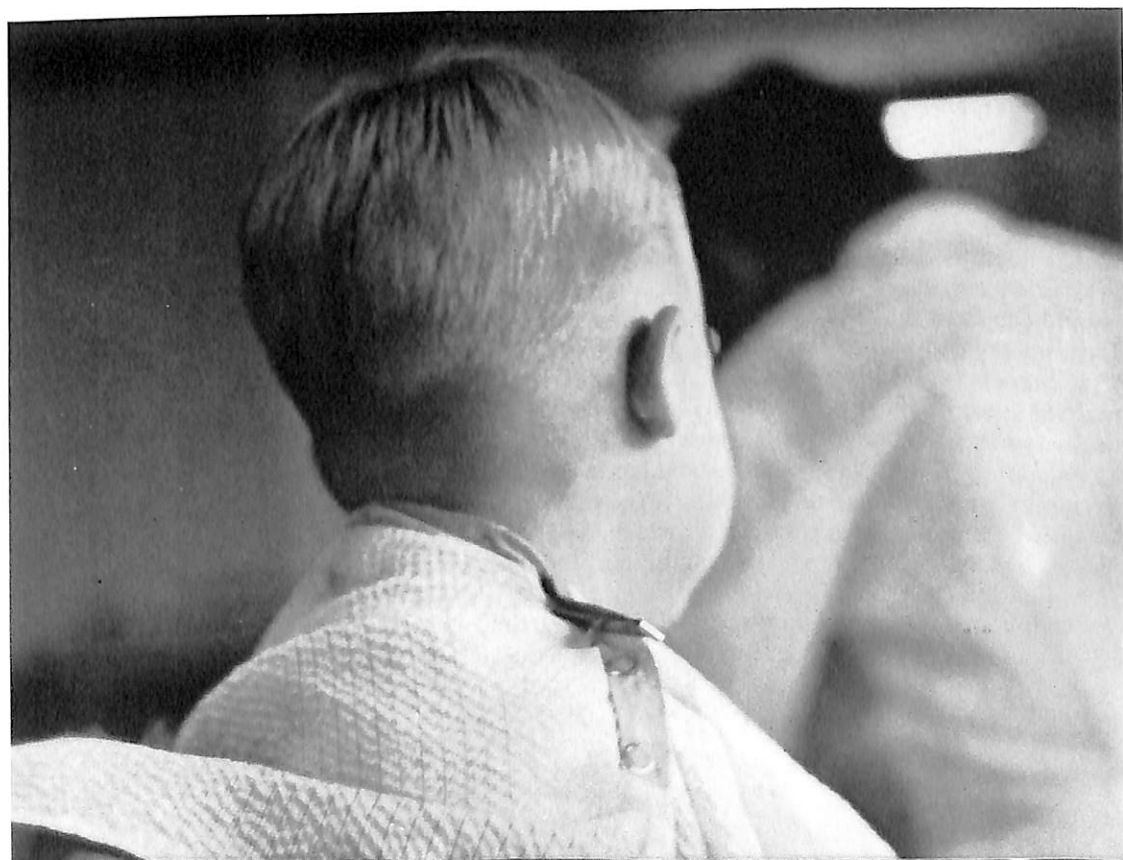
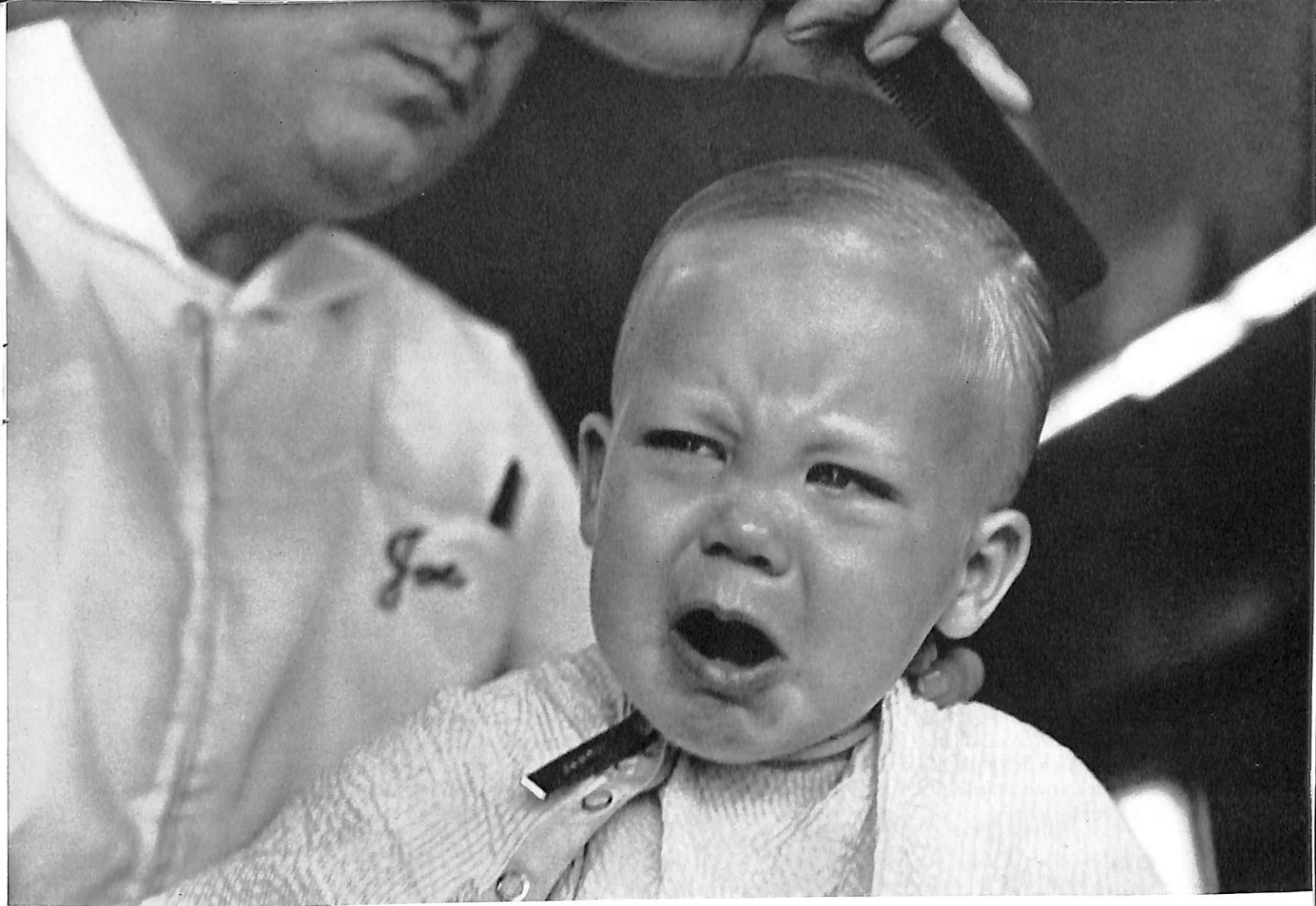
available, at one time or another, to almost everyone. This essay is also that rare photographic bird — a picture story which *really* needs no captions.

It also has a moral:
Pictures are where you find them.









lens care

The amount of care a Leica lens needs to keep its performance at a peak is quite small. But ask a group of photographers about lens maintenance and you will get answers ranging from "Ehh!" to a long and involved program of procedure. Obviously, a certain amount of confusion exists.

So, to get the right answers from the most-qualified source, we went, tape recorder in hand, to Vincent Fochtman, the head lens specialist at E. Leitz, Inc. Here are the results of the interview with him.

Q: *Is lens cleaning really necessary? I once knew a photographer who said he just ran his thumb across his lens to clean it. He said what counts is the picture.*

A: He is obviously talking about composition and not clarity! A clean lens is a "must." It is best to clean your lens as infrequently as possible, however — and not with your thumb! Take care to keep dirt off the lens surface to begin with. Also use a lens hood.

Q: *How does a lens hood help in keeping the lens clean?*

A: It will help to keep fingerprints off the lens. And, if you use a lens in inclement weather, it helps to keep a certain amount of moisture off the front element.

Q: *How about putting something like a colorless UVa filter on as well? Not instead of the lens hood, but besides it.*

A: Well, yes. But filters must be kept spotless, too! Another thing. If you live in a damp climate, it is a good idea to store your equipment along with a desiccant such as silica gel. And if you are using the lens in cold weather, before you bring it inside you should cap it so that the condensation is more apt to form on the cap rather than on the glass itself. But if a fingerprint or moisture does get on the lens, the main thing is to get it off as quickly as possible. Naturally, we are talking about the outer surfaces only. The cleaning of the inside of lens should only be done by qualified experts. And speaking of cleaning — when it becomes necessary to clean (which, as I said before, should be infrequently) certain procedures should be followed.

For instance — all the dust that might be on the lens may not be fibrous. There may be abrasive dust

as well. So, it is always good to use a ball syringe or a camel's hair brush to remove the dust first.

Q: *How do you use the lens tissue?*

A: Wad it up and hold it so that a small cushion of tissue projects beyond your fingertips. Use this cushion gently to wipe the lens' surfaces.

Or, if you have to get into edges or crevices, you might wrap it on a toothpick. But make sure that the toothpick is well covered with a pad of tissue to prevent scratches.

Q: *Is there danger of using too much pressure? If any grit should remain on the lens wouldn't this cause scratching?*

A: Remember that I cautioned about removing the dust first! You use lens tissue to remove things other than dust — such as fingerprints and so forth.

Q: *Are plain lens tissues preferable to treated, or vice versa?*

A: Well, I would say to use plain lens tissue is preferable to impregnated tissue.

Q: *You mentioned that fingerprints particularly should be removed as soon after you notice them as possible. What is the difference between a new fingerprint and an old fingerprint?*

A: Well, a chemical reaction might take place between the moisture from your skin and the optical glass of the lens. The print could actually become etched into the glass after awhile. When this happens you are faced with a repair job.

Q: *Can a little scratch really affect the performance of a lens? Can you really see the effect of it in the finished picture?*

A: It's a matter of degree. A few scratches may not make a noticeable difference. But a lot of tiny scratches might scatter the light, therefore degrade the image quality.

Q: *In other words, if you develop good practices right from the beginning, then you have no worries. But if you scrub away and build up a lot of minor scratches eventually you could ruin your lens.*

A: Yes, and I repeat that the idea is to clean it as infrequently as possible. Do your maintenance by avoiding dirt rather than removing it. Keeping a UVa filter on the lens, as I mentioned, is a good way to avoid dirt.

Q: *When you do have to clean, must you use a lens-cleaning solution? Won't other cleaners like slide-cleaning fluids, alcohol, or carbon tetrachloride do?*

A: No, I'd stick to reputable lens cleaners. Stay away from makeshift cleaners.

Q: *About the coating on the lens. Is there any danger of injuring it when you are cleaning the lens?*

A: Well, what applies to an uncoated lens also applies to a coated lens and even more strongly. The coating is more sensitive to injury than the glass surface itself, so extra precaution should be taken. However, if the coating is slightly damaged or there are slight scratches on it, it will not necessarily affect picture quality.

Q: *You mentioned cleaning both the front and rear surfaces of the lens. Are they equally important?*

A: Both surfaces are important. However, the rear surface becomes more important when it is close to the film plane. For example, in the 21mm Super Angulon, the rear element is so close to the film plane that any sizeable piece of foreign matter might actually cause a localized underexposure on the film.

Q: *Then the rear dust cap is as important as the front cap?*

A: Yes, it is important. Aside from keeping the dust off your rear element it also protects the rangefinder tracking cam, that is on each of our lenses other than those designed for the Visoflex. This tracking cam is machined very accurately and if it gets a blow or a fall, it is no small job to correct the damage. What is more, repair is somewhat expensive. Rear lens caps are cheap insurance. Incidentally, lenses that have a coupling arm are more sensitive to shock damage than ones with a cam that protrudes from the rear section. The arms are more sensitive to a blow or a fall.

Q: *To get back to cleaning: when you get a lens with a long mount, such as the 135mm, where the rear element is 'way inside, how do you get at it?*

A: In most of our long focal length lenses, as well as our telephoto lenses, the optical head separates from the mount. So, remove the lens unit from the mount in these cases.

Q: *When you put it back together, is hand-tightening sufficient to re-seat it accurately in the mount?*

A: That's right.

Q: *Now let's discuss accidental damage to a lens through a blow or a fall. If someone were to bring or mail into us a lens for checking after a fall, would this require lengthy testing? That is, if the lens were o.k. could this be determined by our experts in a short time?*

A: Yes, we could determine in short order whether the fall had done any considerable damage.

Q: *Now in the horrible event that I pick up a dropped lens and see a crack in the front element — have I lost my lens? Must I replace it? Is it a total loss or can anything be saved?*

A: If the lens has a fall and the element cracks, (which is very unusual as a result of a fall, I might add), just that element can be replaced. And the lens can be restored. Incidentally, a lot of times, if a cemented front component is involved, a pattern might form in the lens cement as a result of the fall that might appear like a crack.

Q: *That sounds like another good reason to get expert advice in case of an accident. Things might not be as bad as they look!*

A: That's right.

Q: *I've been advised that, if the lens is on the camera when it is dropped, both camera and lens should be checked. Why is the camera so important?*

A: Well, after a fall, a misalignment could occur in either the camera, or the lens or both.

Q: *In other words, the push of the lens against the camera as a result of a blow might disturb the relationship between the two?*

A: That's right — between the flange and the film plane.

Q: *Speaking of the connection between the camera and the lens: is dirt ever a problem on the threading or the bayonet that connects the camera to the lens?*

A: Sometimes, especially if the dirt is abrasive. It can scuff up the seats of either the lens or the camera or both and therefore create a gap or a space that shouldn't exist for best results. In this case, a lens tissue or a cotton swab could be used to clean the flanges occasionally.

assignment: Spring

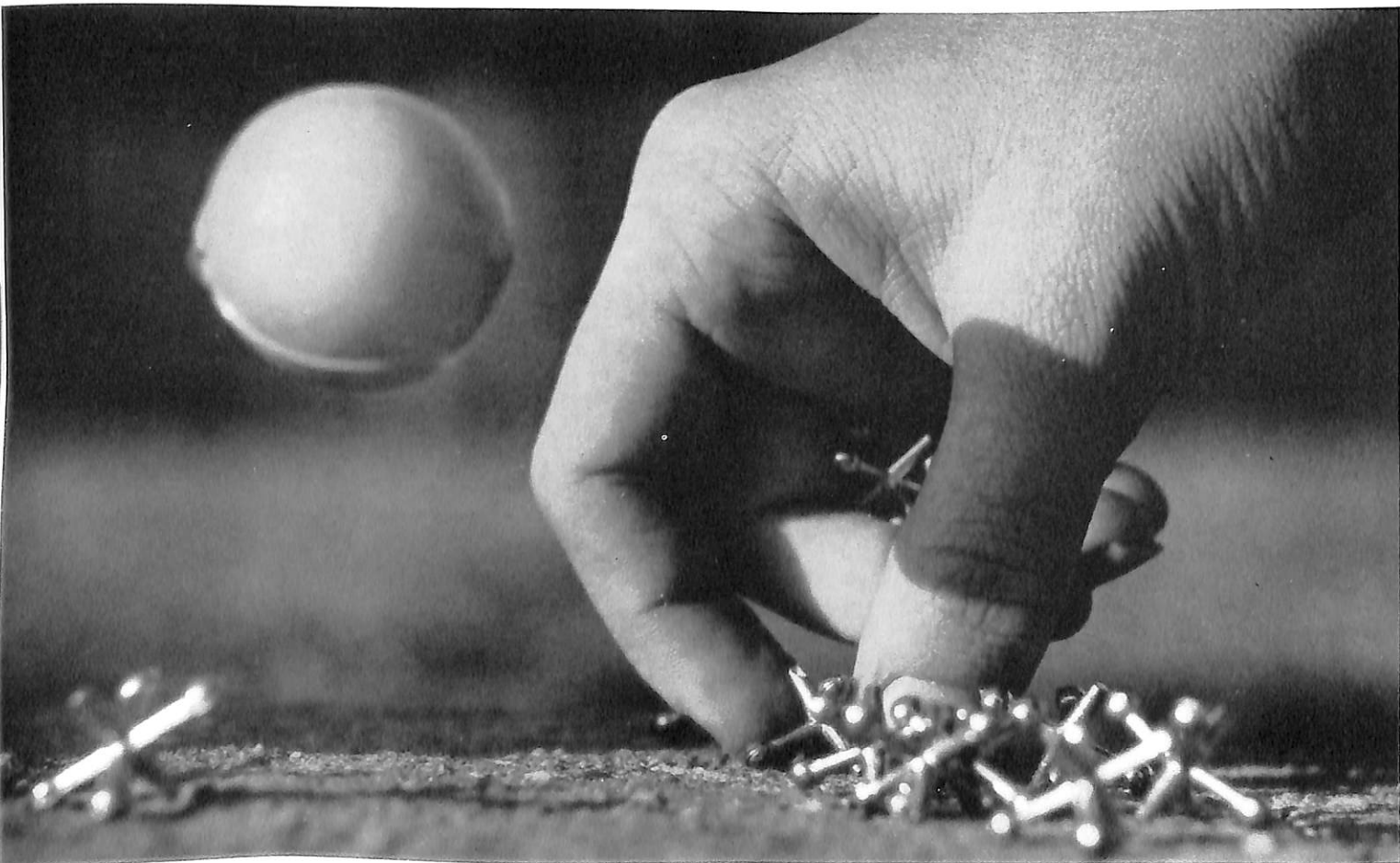
pictures symbolize a season

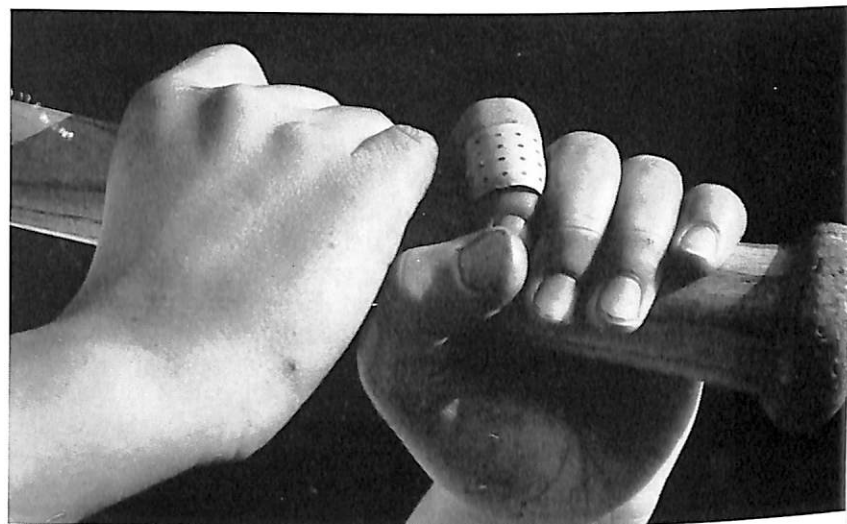
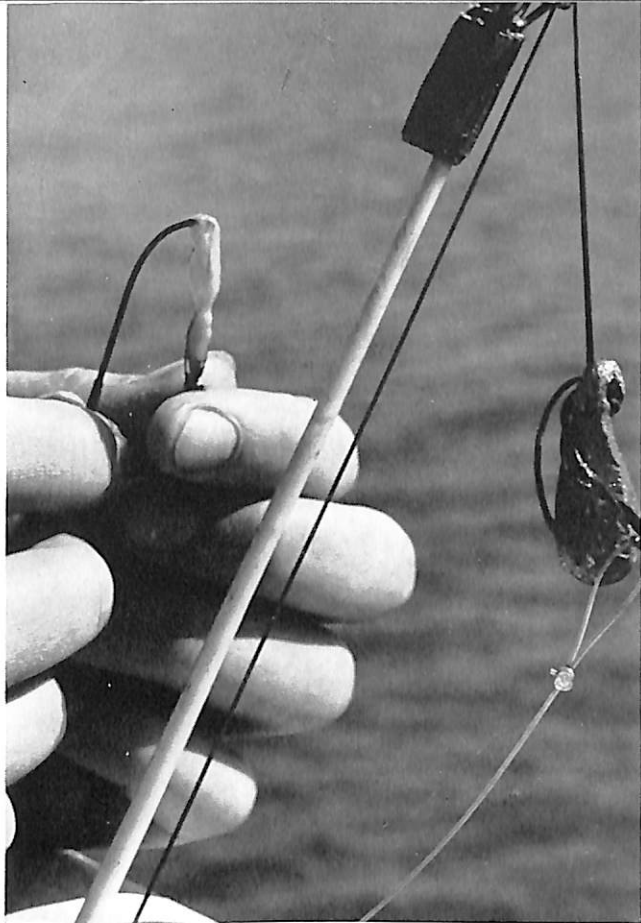
Harvey Weber is a photo editor who does more than just decide what pictures appear in Newsday, a Long Island, N. Y. daily newspaper. Very often, he goes out and takes them as well, because he's a working photographer himself.

Last spring Weber picked up his Leica and shot a seasonal picture feature with the excellent results shown here. It was not only successful with Newsday readers, but also walked off with first prize in the Picture Story category of the Press Photographers' Association of Long Island show. (Incidentally, Weber and several other Leica-using Newsday staffers took "firsts" in several other categories with

individual pictures. One [Rex Lyons] received a "Best In Show" award in the N. Y. Associated Press Association exhibit.)

One of the interesting technical aspects of Weber's prize-winning spring feature is that it was shot entirely with the 65mm Elmar in Universal Focusing Mount, and the Visoflex. This combination provided him with a focusing range from 13 inches to infinity without extension tubes. And this is why it is one of Weber's favorites. With it, he captured the essence of the varied childhood activities that symbolize spring — and in a way that spoke to all viewers — even those old cynics, the photo judges!

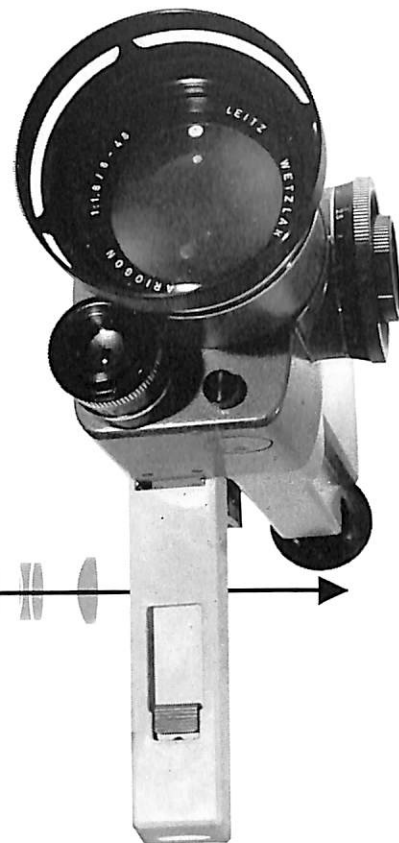
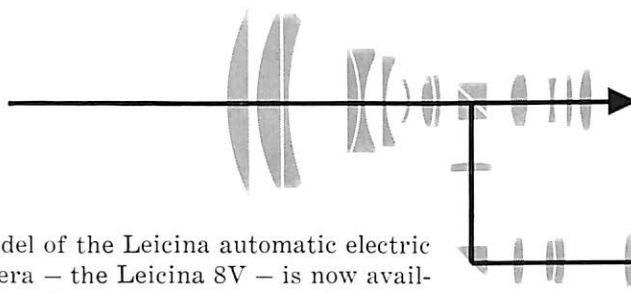




NEW PRODUCTS

zoom-lens Leicina—the 8V

An advanced model of the Leicina automatic electric 8mm movie camera — the Leicina 8V — is now available with two operating speeds and a zoom lens with a remarkable 6 to 1 focal length ratio. Speeds of 16 and 24 fps are provided and the 13-element f/1.8 Variogon lens can be varied continuously in focal length from 8mm for wide angle work to 48mm for telephoto effects.



VARIOGON LENS zooms from 8-48mm, brings subject "closer and closer." Exposure is controlled by an automatic electric eye system.

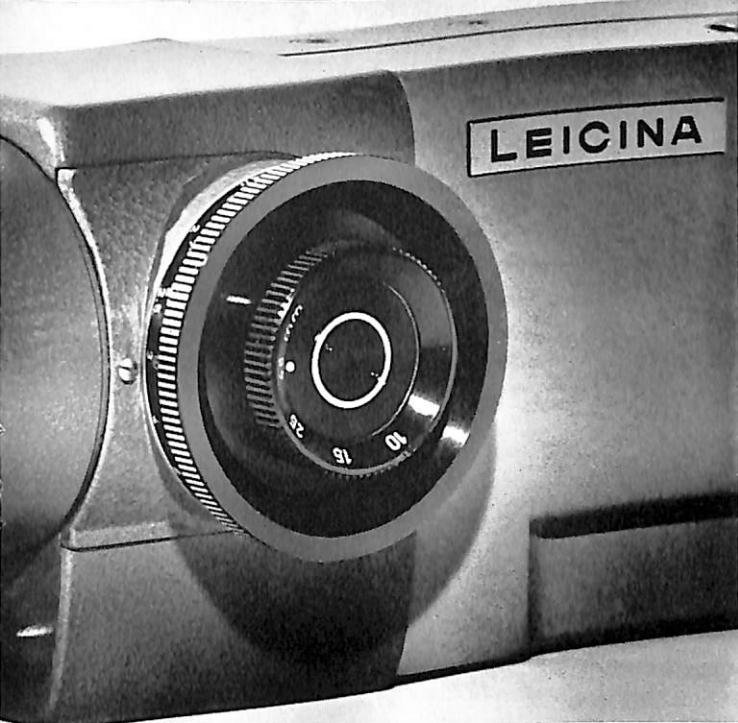
Some of the other features of the new Leicina 8V:

- Coaxial wheels to control focus and zoom.
- Front-of-diaphragm prism pickup for reflex viewing system. Viewing system always "sees" at f/1.8.
- Viewfinder image magnification from .6x (60% life-size) in 8mm position of lens to 3.6x (almost four times life-size) in 48mm position of lens.
- Viewfinder light-block which keeps rear light from entering optical system through the viewfinder when camera is used away from the eye, as on a tripod.
- Visible check of meter-battery condition.

Besides the new features just mentioned, the Leicina 8V also has the automation and other design innovations introduced in the 8S (see Leica Photography No. 4, 1960). These include:

- Automatic electric-eye aperture control for film speeds from 3-800 ASA, plus manual control for creative photography.

- Flicker-free and parallax-free, through-the-lens reflex framing and focusing; eye-piece adjusts to individual eyesight.
- Footage indicator and aperture visible in finder.
- Single-frame exposure as well as normal frames-per-second speeds.
- Power back-up to five seconds for lap dissolves.
- Permanently-attached, foldaway handgrip; folded grip protects release trigger from accidental pressure.
- Forehead brace, adjustable for right- or left-eye use to ensure steady pictures.
- Carrying strap marked for distance serves as ruler for critical close-ups.
- Gold-plated electrical contacts for life-long reliability.
- Uses inexpensive double-8mm film rolls.
- Visible battery-condition check.



COAXIAL WHEELS control both zooming and focus in Leicina 8V.

space-age styling

You'll never mistake the Leicina 8V for another movie camera. Not even its handsome companion the 8S has the unmistakable look of the new model.

The Leitz concept of having design follow function has provided the Leicina 8V not only with compactness, but also with an ineffable chic which sets it apart from the crowd.

Hardly larger than a long telephoto Leica lens, the 8V's sleek housing and 8-to-48mm zoom lens combine the potential for highly sophisticated motion-picture production with push-button automation and precision unique in the 8mm field.

Its rugged electric motor, which appeared first in the 8S, is modified in the 8V to offer 24, as well as 16 frames per second. The twist of a control dial shifts the fps speeds and adjusts the automatic electric-eye exposure meter for perfect exposures at either setting.

zoom lens

The 8V's f/1.8 Variogon zoom lens puts an infinite number of focal lengths from 8mm to 48mm literally at your fingertips. Focusing is from 40 inches to infinity.

You can zoom continuously from the 8mm, wide-angle setting to the 48mm long-focus position, creating the "zoom" effects like those familiar to television sports fans. In the 8mm wideangle position, the Variogon lens will see most of the ball park, for example. As the ball leaves the bat in a long fly, you follow its flight in the viewfinder while turning the zoom control as the outfielder races to get set for the catch. In the extreme 48mm position, the lens shows the outfielder making the catch as if you were look-

ing at him through binoculars from the stands. On screen, the effect is that of both audience and camera zooming through space to the outfield.

The Variogon zoom is, in effect, everything from a wideangle to a telephoto, ending the need for a bagful of separate objectives. In addition to being continuously variable in focal length, its mount has specific settings for 8, 10, 15, 25, and 48mm. You can set the lens at any of these (or anywhere in between) and use it as you would a fixed focal-length lens.

viewfinder system

The 8V's finder system is similar to that in the 8S in that you frame and focus the scene with light that comes through the lens. But the 8V's focusing-screen brightness never varies with the diaphragm setting of the taking lens. The viewfinder always "sees" the scene at f/1.8, since the prism which diverts light from the main lens to the finder system is in front of the diaphragm.

As in the finder of the 8S, there is a black circle in the center of the 8V's finder field. By adjusting the finder eyepiece until this circle becomes sharp, you set the finder for your individual eyesight, from +5 to -5 diopters. From then on, you frame and focus your scenes on a groundglass screen which is so fine that it is virtually invisible.

Typical of the foolproof engineering of the 8V is the built-in black-out control for the viewfinder. This is a small shutter which blocks off light from the finder system. And here's why it is needed: the beam-splitter which feeds light into the finder system is up front, well ahead of most elements in the taking lens. And so, there is some possibility of light's entering the finder system through the eyepiece, seeping into the main lens system and possibly fogging the film.

This is possible only when the camera is being used on a tripod and you are not using the viewfinder; there is no chance of its happening when the camera is held to the eye. But for the rare occasions when such fogging could occur, the Leicina 8V user merely turns a knob, blacking out the finder system for absolute safety.

Within the viewfinder, alongside the picture field, is a film indicator which shows at a glance how much film has been exposed and how much is left. Markings appear for $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and 0 film capacity.

At the bottom of the viewfinder window there is an aperture scale from f/2 to f/16 whose moving arrow is linked with the automatic exposure system. It shows the aperture at which the film is being exposed at any given moment. It also permits you



to set the diaphragm to a given f/stop when using manual control.

motor

The motor of the 8V is the same precise, rugged motor featured in the 8S, but modified to provide two speeds — 16 and 24 fps. The 16 fps speed is used for normal silent films, while the 24 fps provides for the later addition of sound, since sound films are screened at the faster speed. The 24 fps speed is also useful in silent films for smoothing out the action of fast-moving subjects.

The 8V's motor is controlled by a four-position dial marked "24," "16," "0," and "RT." The "0" position switches out both the motor and exposure-control batteries and thus prevents accidental film advance and unnecessary battery drain. The "RT" setting has two purposes. It causes the motor to reverse its direction, backing up the film for lap-dissolve sequences. It also makes it possible to check visually in the viewfinder the condition of the exposure-control battery. All the motor dial positions have click stops.

The motor is powered by four "AA"-size penlight 1.5 volt batteries or a rechargeable nickel-cadmium battery which is available as an accessory. As in the 8S, motor-battery condition can be checked by means of a galvanometer in the spool chamber of the camera.

A set of penlight batteries or one charge of a nickel-cadmium battery will furnish power for the exposing of at least 10 rolls of film.

exposure automation

Exposure control in the 8V is the same as that in the 8S. The meter has a cadmium sulphide cell in front of which is mounted a coated lens providing an 18° measuring angle. The CdS cell is powered by a tiny,

button-sized mercury cell whose normal operating life is nearly two years.

The mercury battery's condition can be tested by setting the motor-control dial to "RT" while observing the aperture-pointer in the viewfinder window. If the pointer swings past the f/16 marking on the scale, the battery is good.

The 8V's exposure dial is marked with click-stopped film-speed indexes from ASA 6 to 400, and German DIN ratings from 9 to 27. Intermediate, unmarked click-stop settings provide for other speed ratings, including ASA 3 and 800.

There are also "2X" and "4X" markings on the meter cell tube in addition to a setting for normal operation. When the meter dial indicator is set to one of these settings, it provides automatic exposure compensation for filters requiring that factor.

Manual control of exposure is, of course, also available at all times. The "automation overdrive" feature which appeared first on the 8S is also a part of the 8V. This assures that, even after a manual readjustment of the exposure level has been made, the meter and diaphragm of the camera will continue to respond automatically to changes in light intensity.

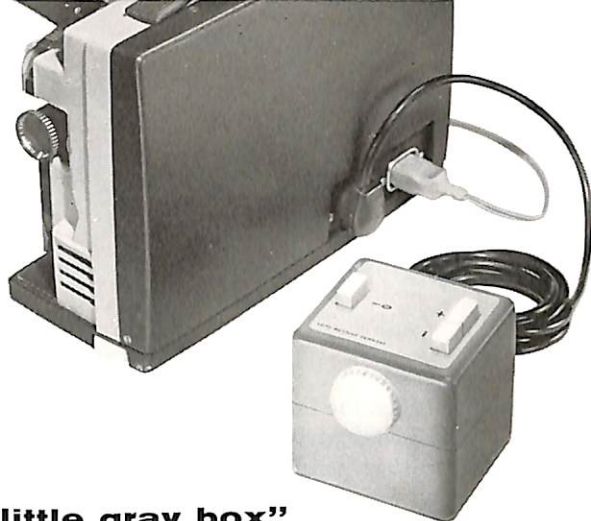
functional design

The graceful, compact body design of the 8S, which is engineered to reduce vibration and provide steady screen images, is incorporated in the 8V. The three-point holding support, including the swing-out forehead-brace bar, provides equal ease of operation for either left- or right-eyed movie-makers.

The folding handgrip of the 8V includes a thumb-operated spring lock which holds it in its folded-down position when the camera is stored or carried.

professional scope

Cinematographically speaking, little is denied to the 8V owner in the way of versatility and special effects. Its f/1.8, 6-to-1 zoom lens, two speeds (plus single-frame advance), through-the-lens framing and focusing, coaxial zoom and focus controls and other advanced features make professional movie effects possible. Animated titles, lap-dissolves, zoom-in and zoom-out sequences, zoom-and-pan combinations, fade-ins and fade-outs, simulated "dolly" shots from a fixed position — all of these and more are available to the 8V owner — and with push button ease. Price of the Leicina 8V (Cat. No. 20,523), with f/1.8 Variogon 8mm-48mm lens, lens hood accepting series 8 filters, neck-strap and battery for exposure meter is \$456.00 including Federal tax. A hard leather carrying case (Cat. No. 22,407) is \$33.00; in soft leather (Cat. No. 22,406), the case is \$16.50.



"little gray box" synchs Cinovid movie sound

A speed-control unit which helps to synchronize tape-recorded sound tracks with the Leitz Cinovid 8mm projector has just been announced. It can be used to synchronize sound effects, music and commentary played on a tape recorder with the screen image of your home movies.

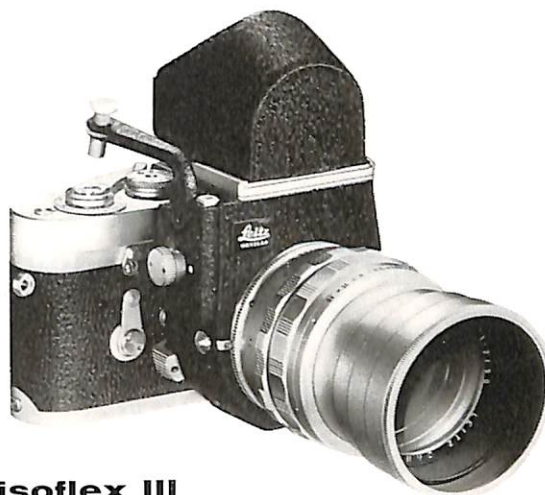
The synchronization unit is contained in a small gray plastic housing. Once connected, the synchronizer controls the operation of the projector. On its top are three push-buttons: an on-off switch, a button marked "+", and another marked "-". On the side of the housing is a small pilot light which gives soft illumination for reel-changing, etc., when the projector is switched off. As the Cinovid is switched on, the pilot light dims.

To use the synchronizing unit, you merely plug its connecting cord into the socket provided in the Cinovid projector. The Cinovid is connected to line current in the normal way. And, since the connecting cord is six feet long, you can move to a comfortable chair and run the show from there with the synchronizer.

When held down, the "+" button makes the projector run faster; the "-" button slows it down. While running your show, you merely listen to the tape-recorded sound while watching your movie unreel. If the sound seems to be creeping ahead of the film sequences, you merely hold down the "+" button until sight synchronizes with sound. If the sound lags, depress the "-" button, slowing down the projector until the sound comes back into synchronization.

The advantage of such a simple synchronization system for home movies is apparent. There is no need to worry about film-loop size, no concern about the i.p.s. tape speed at which the sound was recorded, no problem with connections to the tape play-back. Any tape made at any speed can be synchronized with Cinovid movies.

The device, with six-foot connecting cord and plug (Cat. No. 27,010) will cost \$30.00.



Visoflex III has three-position mirror

The recently-introduced Visoflex III increases the versatility of the Leica rangefinder-reflex system of photography by adding still further to the operating speed and convenience of reflex photography with the "M" Leicas.

flexible operation

The new Visoflex, incidentally, does not replace the Visoflex II or IIa, which will continue to be available. But it does go into action faster and offers "custom-tailored" mirror operation to fit the type of picture being made. For instance, the mirror-control knob of the new Visoflex has three click-stop, color-coded settings: rapid upswing/rapid-return (for action pictures), slow upswing/rapid return (for slow shutter speeds used in technical photos, etc.) and with the mirror locked up out of the light path (for time exposures and other special purposes).

quick mounting

Unlike that of the Visoflex II and IIa, the 4X eye-level magnifier of the new Visoflex need not be removed and remounted to attach the reflex housing to or take it off the camera.

Instead, the Visoflex is slipped into position with magnifier attached. Then, an ingenious lever at the base of the Visoflex III is used to turn the bayonet ring at the rear of the unit, locking it into the bayonet mount of the Leica. This locking lever makes the new Visoflex even easier to change than an ordinary lens.

Lenses and accessories for the Visoflex II and IIa, including the 5X straight magnifier for below-eye-level use, will also fit the Visoflex III.

The Visoflex III is a further step toward the perfection of a single-camera system of photography offering the advantages of both reflex and rangefinder operation.

Price of the Visoflex III (Cat. No. 16,498), complete with 4X eye-level magnifier, is \$162.00, in bayonet mount only.

Trinovid-a really new binocular

Until recently, binocular users had a melancholy choice: they could have a small glass by settling for low magnification or a high-powered one by accepting weight and bulk along with it. And, at that, "small" was a comparative term. Traditional porro-prism binocular optics required housings which bulged awkwardly, even in low-power glasses with relatively small prisms. In higher powered models

Not surprisingly, the Leitz factory has been the one to solve the problems involved. So, the main "secret" of the Trinovids' startling design is really the skill of the men who make them.

But Leitz did more than solve manufacturing problems in developing these revolutionary glasses. Characteristically, they added a unique, patented optical feature of their own — internal focusing.



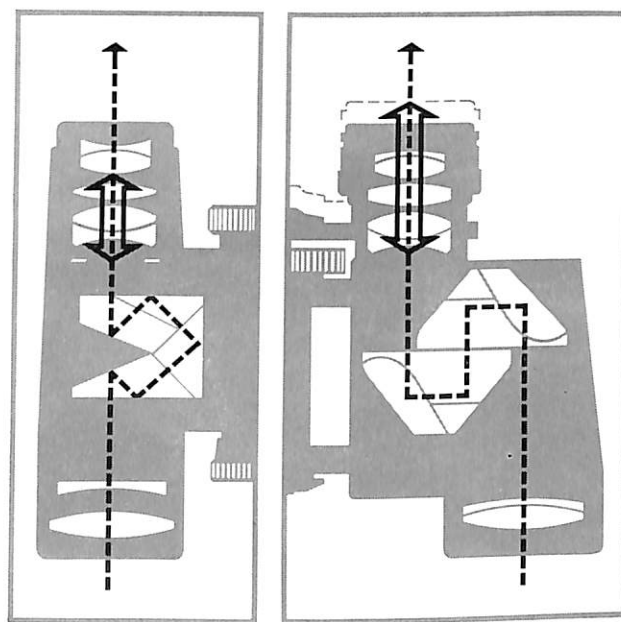
THE THREE TRINOVIDS include 10 x 40, 8 x 32 and 6 x 24 models.

with large prisms, housings became spectacularly unhandy.

But the radically-designed new Leitz Trinovid binoculars change all that. Sleek and small, they slip easily into a pocket — even the powerful 10 x 40 model. And, along with sleek, small housings, the Trinovids have a number of features available in no other glasses.

trade "secret"

The secret of the Trinovids' slim silhouette is the Uppendahl prism (see diagram). Its design is, in fact, not new. But the skill required to turn it from a laboratory curiosity into a practical binocular component has taken years to develop.



TRINOVID 8 x 32

USUAL 8 x 30 GLASS

internal focusing.

Unlike conventional binoculars, the Trinovid is focused by moving internal optical elements. There are no external sliding tubes. Result: Trinovids are completely dust- and waterproof! Complete submersion in several feet of water cannot force a drop inside these glasses.

The interesting focusing mechanism also makes it possible to have two central focusing wheels — one to focus both eyepieces together, a second to adjust the right eyepiece to individual vision. Both wheels are fingertip-controlled without removing the glasses from your eyes.

All models of the Trinovid have wideangle eyepieces. The actual field width will, of course, vary

with the magnification of the binocular.

The 6 x 24, for instance, shows you a 212-yard-wide field at 1000 yards distance, with six-times magnification. This is 40% wider than the field of conventional binoculars with the same specifications.

TRINOVID BINOCULAR SPECIFICATIONS							
	MAGNIFICATION	OBJECTIVE DIAMETER	TWILIGHT FACTOR	EXIT PUPIL	FIELD OF VIEW*	WEIGHT	LENGTH
6x24	6X	24mm	12	4mm	212yds	15½ ozs	3¾ ins
8x32	8X	32mm	16	4mm	150yds	17 ozs	4½ ins
10x40	10X	40mm	20	4mm	122yds	19 ozs	5½ ins

*At 1000 YDS

twilight factor

Binocular research over the years has developed a new standard of comparison for binocular performance to replace the outmoded "relative brightness" factor. The new standard is the "twilight factor" — a figure to indicate the glasses' comparative ability to resolve detail in low light — a most difficult "seeing" condition.

The twilight factor was evolved from the fact that ability to resolve detail is based not only on the brightness of the image reaching your eye, but also on the amount of magnification involved. After all, when you want to read fine print, you reach for a magnifying glass!

So, a formula has been developed which considers both magnification and the size of the exit pupil (the latter indicates the amount of light emerging from the eyepiece. In practical terms, it should be 3.5mm or more in diameter in figuring the twilight factor). The formula states that the "twilight factor" is the square root of the product of magnification times the diameter (in mm.) of the objective lens. That is, $T = \sqrt{M \times D}$. The result is a figure which helps you to compare the low light performance of binoculars with varying optical specifications.

For instance, in the 6 x 24 Trinovid, the 6 stands for magnification; the 24 is the diameter of the

objective (front) lens in millimeters. To find the twilight factor, we would find the square root of 6-times-24, or 12. For the 8 x 32 model, the twilight factor is 16 and for the 10 x 40, it is 20.

6 x 24

The 6 x 24 Trinovid is at home anywhere from the Museum of Natural History to the top of Mount Whitney. An all-purpose glass, it is the smallest Trinovid model and has a superwide, 212-yard field of view. A special feature of the 6 x 24 is its ability to focus as close as 11½ feet. This makes for convenient close-up inspection of exhibits, high-up architectural details, birds in feeding stations, animals in zoo enclosures and other subjects to which you cannot get near enough for naked-eye study.

The 6 x 24 Trinovid, with neck strap and hard leather case (Cat. No. 40,201) is \$189.00. With soft leather eveready case (Cat. No. 40,202), it is \$183.00. Prices on all Trinovids are subject to 10% F.S.T. The 6 x 24 model will be available beginning in June 1963.

8 x 32

With 33% more magnification than the 6 x 24 and a twilight factor of 16, the 8 x 32 Trinovid makes an excellent all-round glass for the traveler, sports fan and outdoorsman. Like all Trinovids, the 8 x 32 is dust- and watertight, which makes it indifferent to the attacks of wind and weather.

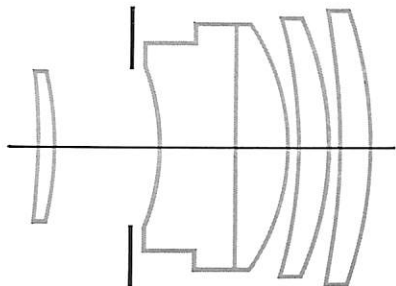
The 8 x 32 model, complete with neck strap and hard leather case (Cat. No. 40,206), is \$210.00. With soft leather case (Cat. No. 40,207), it is \$204.00. The 8 x 32 model is available for immediate delivery.

10 x 40

The most powerful of the Trinovids — the 10 x 40 — is still small enough to slip easily into a pocket or pack. It is the glass for the man who must search far horizons, the hunter who must spot distant game in the dimness of the woods. The twilight factor of the 10 x 40 binocular is an impressive 20 — highest of all three models. Despite its 10X magnification, and thanks to its compact design and excellent balance, this model is easy to hold steady, even for extended observations.

The 10 x 40 Trinovid, complete with neck strap and hard leather case (Cat. No. 40,211), is \$225.00. With soft leather case (Cat. No. 40,212), it is \$219.00. The 10 x 40 will be available in June 1963.

135mm Elmarit f/2.8 introduced



A new, fast 135mm lens — the Elmarit f/2.8 — for Leica models M3 and M2 was recently announced. The new lens, which has twice the speed of the Elmar f/4, is unique among long Leica lenses in that it bears an Optical Viewing Unit somewhat like those on the "RF" wideangle lenses for the M3, but magnifying rather than reducing the image. The 135mm Elmarit does not, however, replace the 135mm Elmar f/4, which will continue to be available.

With the appearance of the new Elmarit, the 135mm focal length becomes one of the most versatile of all. Already a key focal length for distance photography, portraits and close-ups, the 135mm lens now offers enough speed for existing-light color photography in night clubs and theaters, for animal close-ups inside zoo buildings and the like — even with the slower emulsions. At the same time, it retains all the usefulness of the 135mm lenses having smaller maximum apertures.

longer rangefinder base

But why the Optical Viewing Unit? To increase the effective length of the rangefinder base by magnifying the image in the focusing viewfinder. At the same time, it magnifies the viewfinder image so that it fills the field of built-in 90mm brightline viewfinder frames with a 135mm field, making it clearer.

Long focal length combined with high speed cuts depth of field down to a matter of inches when the lens is used wide open. At minimum distances especially, focusing must be critically accurate. And a vital factor in focusing accuracy is the base length of the rangefinder. The longer the effective base, the more accurate the focus. But the effective base depends on physical base length *multiplied by magnification*. And this is where the 135mm Elmarit's Optical Viewing Unit comes in.

It magnifies the rangefinder image of the Leica M cameras by $1\frac{1}{2}x$, boosting the already-large 68mm physical base length to an effective 102mm. This extra-long base ensures absolute accuracy in focusing the new Elmarit, despite the extremely shallow



depth of field which exists at the closest focusing distance and at full aperture.

The Optical Viewing Unit also magnifies the viewfinder image within the 90mm frame in the M3 and M2 to show a 135mm field. The 90mm frame was chosen for the M3, despite the existence of a built-in 135mm frame, because of the change in image size produced by the Optical Viewing Unit. This arrangement also offers a great advantage to those who wear glasses, since they will be able to see the modified image in the 90mm frame with ease.

The lens unit of the 135mm Elmarit, like those of many of the longer Leitz lenses, can be removed and used for close-ups with the Bellows I and II. It is used with the same adapter ring (Cat. No. 16,598) as that for the 90mm Summicron lens unit.

"built-in" UV filter

The 135mm Elmarit has five elements, the first two of which contain a special glass developed by the glass research laboratory of the Leitz factory in Germany. Another interesting feature of the new lens is a dye incorporated in the Canada balsam used to cement the elements. This new dye absorbs ultraviolet light and acts as a built-in UV filter, virtually eliminating the need for UV or Skylight filters to control bluish casts in color slides.

The mount of the new lens is black-anodized. This produces a handsome, scratch-resistant surface which is chemically equivalent to sapphire, and second only to diamonds in hardness.

A built-on lens hood, like those on the Telyts and certain other Leica lenses, is also a feature of the 135mm Elmarit f/2.8. Current Leitz filters will not fit the new lens, whose flange diameter does not correspond exactly to other Leica lenses. But a filter-retaining ring which will accept standard Series 7 filters is supplied with the lens.

Price of the 135mm Elmarit f/2.8 lens, complete with built-on lens hood, front and rear dust covers and Series 7 filter-retaining ring (Cat. No. 11,829), is \$258.00.

Horvex 3 photoelectric exposure meter



To meet the demand for a sensitive, well-made, yet inexpensive photoelectric exposure meter, E. Leitz, Inc. is now distributing the Horvex 3 meter. It is made by Metrawatt A. G. Nürnberg, who also produce the Leica Meter 3 and the "MC" shutter-coupled meter for the M3 and M2.

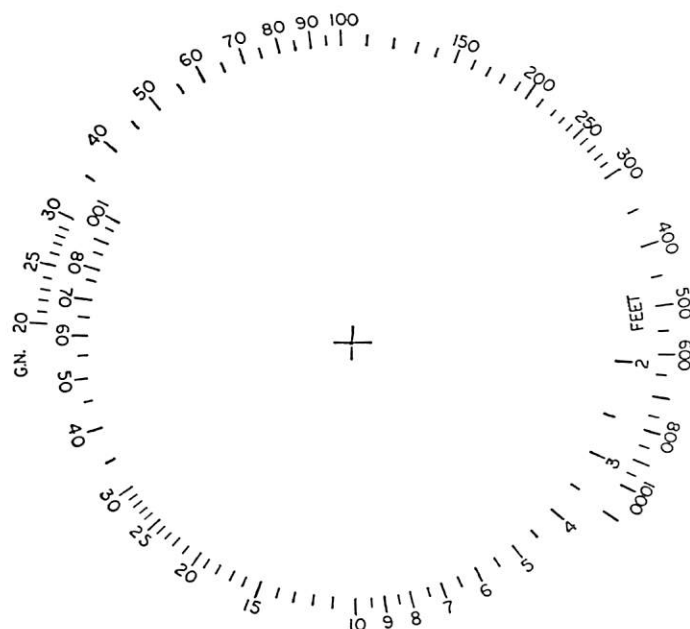
The Horvex 3 is a selenium-cell meter, designed for one-hand operation, with a wide light-measuring range — scales are provided for film speeds from ASA 3 to 1600, exposures from 30 seconds to 1/1000th, LVS numbers from 1 to 17. By adding a booster cell, the sensitivity of the meter for low-light measurement is increased.

The meter's dial is calibrated for both ASA and DIN film speeds and indicates LVS exposure numbers as well as shutter-speed and aperture combinations. Thus, it is useable with any camera having adjustable controls. For motion picture use, the dial of the Horvex 3 also provides settings for 8, 16, 32 and 64 frames-per-second.

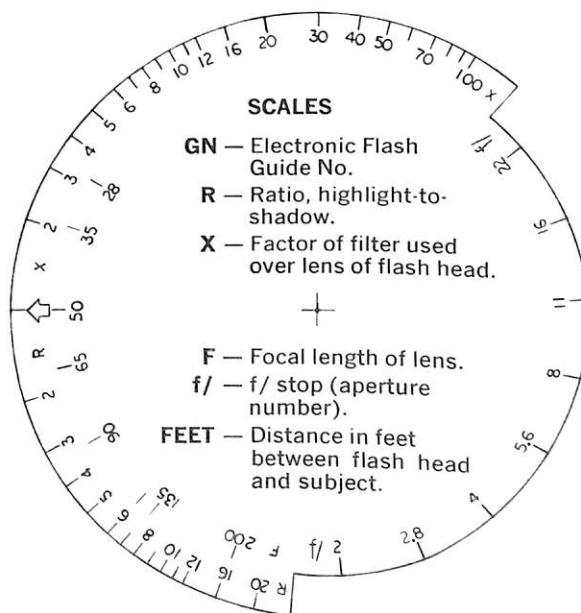
Pictorial "instructions" for operating the meter appear on its baseplate, so that the user has a reminder of correct procedure with him wherever he goes.

The Horvex 3 meter comes complete with a flexible metal carrying chain and incident light adapter. A booster cell for low-light use, and leather cases for both the meter and booster cell are available as accessories. Catalog number is 14,220 and price is \$15.90. The booster cell (Cat. No. 14,222) is \$6.30.

FLASH "SLIDE RULE"
solves lighting problems.
(See story on following pages.)



WARNING!! Unless care is used in centering the two parts of the calculator during assembly it won't perform accurately.



a versatile flash calculator / Ray Blach

"slide" rule solves lighting problems

Tired of dealing with square roots, division, multiplication and, eventually, distraction in handling your electronic flash calculations? I was, so I decided to make a home-brewed calculator that would solve my lighting problems fast (see preceding page).

As things turned out, it not only solves simple one-light and 1:1 highlight-to-shadow ratio problems, but can be used for other puzzlers as well. For instance: indoor and outdoor fill-flash lighting at ratios up to 16:1, subduing backgrounds in full sunlight, choosing proper neutral density filters for the flash head, multiple flash ratios, maintenance of image size when switching focal lengths, copying and close-up problems — and lots more!

It takes a bit of practice to familiarize yourself with the calculator, but a half-hour spent learning how to use it will pay off in time saved during future shooting sessions with electronic flash.

The most practical way to learn how to use the calculator is — to use it! So, what follow are various kinds of photo problems, together with an explanation of how the calculator is used to solve them. First, assemble the calculator according to directions. Then follow through the various problems outlined, solving them with the calculator according to directions. When you're done, you'll have mastered this useful gadget and be ready to solve your individual electronic flash lighting problems as they arise.

CALCULATOR ASSEMBLY

1. Remove or photo-copy calculator.
 2. Attach to light card stock by dry-mounting or with rubber cement. (Coat both card and calculator with cement. Allow to dry. Press together carefully to avoid wrinkles.)
 3. Cut out on solid lines.
 4. Assemble two parts using center indicating marks. (A small rivet or eyelet will do nicely to fasten.) To prolong the life of the calculator spray with artist's fixative.
-

basic calculations for 1:1 ratios

Problem: How do I find the proper f/stop to use when using my electronic flash unit at various distances from the subject?

Data: Guide No. 40: distance of flash head to subject, 10 feet: Ratio desired — 1:1.

Solution: Set arrow (above 50mm on F scale) to 40 on GN scale. Over 10 FEET read f/4 on f/ scale. Thus, for a ratio of 1:1 at a distance of 10 feet when using Guide No. 40 the f/-stop should be f/4.

The same solution is used when the aperture is specified and the lamp-subject distance is wanted. In this case, you would look under the selected aperture on the f/-stop scale and read off the proper distance from the FEET scale. In the solution above, assuming f/4 to be the selected aperture, you would read 10 FEET as the proper distance.

outdoor fill-flash

Subjects photographed in sunlight have strong contrasts. If exposure is computed for the highlights the shadows will usually lack detail. Conversely, if exposure is for the shadows, the highlights may be "washed out."

Since we cannot control the sun, we should use controlled supplemental light to lighten the shadows. The Braun Hobby electronic flash units, for instance, serve admirably in this capacity.

Remember that the latitude of the film that is being used must be considered when deciding on our lighting ratio. Black and white film, of course, has the longest scale and will reproduce the greatest range of tones between black and white. We are, however, limited when making the print by the printing paper, which has a shorter scale than the film. And, the ability of color film to handle contrasty subjects is quite small as compared to black and white. So, to avoid excessive contrast it is best to use a lighting ratio of not more than 6:1 for black and white, and not more than 4:1 for color.

Problem: How can I balance fill-in flash to produce a specific highlight-to-shadow ratio?

Data: Flash is on camera, 50mm lens, Guide No. 40: highlight-to-shadow ratio desired 3:1.

Solution: Take a normal meter reading for the highlights. Assume, for this example, that the aperture

called is for f/8. Set R 3 to GN 40. Under f/8 (the aperture to be used) read eight-and-a-half FEET.

Thus, for a 3:1 ratio under the above conditions the flash head must be at eight-and-a-half feet. Either move back with flash on camera, or use an extension cord for off-camera flash.

Problem: If instead of using a 50mm lens under the conditions stated above a 90mm lens is used, what is the procedure?

Data: 90mm lens: Guide No. 40: highlight-to-shadow ratio desired 3:1.

Solution: Take a normal meter reading for the highlights. Assume it is f/8. Set 90mm to GN 40. Under f/8 read 9 FEET. Without changing the setting refer to R 3 and note that it is nearly under GN 40. Therefore by changing from a 50mm lens to a 90mm lens you have established about a 3:1 light ratio.

It is interesting to note in connection with the two above solutions that (if the flash is on the camera at all times) when using the 50mm lens at the 3:1 ratio distance of eight-and-a-half feet the image size will be decreased by a factor of 1.7 but by changing to the 90mm at a distance of nine feet the image size will be increased by a factor of 1.8. Thus by changing to the 90mm lens, practically the same image size is maintained at nine feet as with the 50mm lens at five feet and at the same time a 3:1 light ratio is obtained.

how to subdue the background

Problem: How can I subdue an outdoor background when taking a portrait?

Data: Flash Guide No. 95: flash on camera.

Solution: (In this problem the flash becomes, in effect, the only source of light.)

Take a general meter reading. Assume it to be f/5.6 at 1/50th second. Set arrow to GN 95 and note f/5.6 is over 17 FEET. Set R 8 (8:1 ratio*) to GN 95. Over 17 FEET read f/16. Set arrow to GN 95. Under f/16 read six FEET.

For a subdued background under the above conditions f/16 should be used at six feet.

*When a ratio of 8:1 is used, flash illumination is 8 times as bright as the sunlight on which the meter reading was based. This causes the background to go dark by under-exposure. If a lighter background than calculated above is wanted, lower ratios should be used.

flash "x" filters

Flash "X" filters are, in effect, neutral density filters of translucent material to be used over the face of the flash head when working at a distance at which the light output of your flash unit is too great for the film being used and the lighting ratio desired.

Making the filters at home is really quite simple once you have the material. (See Leica Photography #1, 1960, pp. 26-29.). Remember: whatever material

is used must be white or neutral in color in order not to alter the color temperature of the light from the flash. For the material — try a dealer in sheet plastics. Kodak's Wratten #96 Neutral Density gelatine filters are also available in increments of 1/3 stop. To make the filters assemble sheets of the material of a size suitable to cover the lens of your flash unit. They can be held in place with masking tape.

Calibrate the filters by taking a reading of a constant light source with your meter. Then place a filter over the window of the exposure meter and note the difference in the reading. A difference in light transmission of one stop indicates a filter factor of 2X, etc. Mark each filter for easy reference.

When using more than one filter over the flash be sure to *multiply* the factors — *do not add them*. i.e. — 2X plus 4X filters equal an 8X.

Indoor fill-flash

Problem: How can I obtain a specific highlight-to-shadow ratio when taking a portrait next to a window using daylight as the main source of light and flash as the fill-in light?

Data: Flash Guide No. 40: highlight-to-shadow ratio desired: 3:1.

Solution: Determine normal highlight exposure for daylight. (Assume it to be f/5.6 at 1/50th second.) Set arrow to GN 40. Under f/5.6 read seven FEET. This is the flash distance for a 1:1 ratio. Set R 3 to GN 40. Under f/5.6 read 12 FEET.

To satisfy the above conditions the flash head should be placed at 12 feet from the subject. This will give a 3:1 ratio daylight to flash.

If 12 feet is an inconvenient distance the flash may remain at seven feet (1:1 ratio distance) and a 3X neutral filter used to reduce its light by a factor of three times.

(If the flash head is placed at 45 degrees in relation to the window-pane there will be a slight overlap of daylight and flash on a small portion of the subject. This may be disregarded since neither the light from the window nor that from the flash are at full strength in this area).

Problem: How can I balance fill-in flash to produce a specific highlight-to-shadow ratio when photographing displays in a store under existing overhead lights?

Data: 3:1 highlight-to-shadow ratio desired: available light from overhead lights only. Guide No. 160.

Solution: The fluorescent lighting used today in most stores, offices and shops is brighter than you might suspect.

Let's assume that you will use a highspeed film, such as Tri X, with a Guide No. 160 for your Braun F 21.

Determine general meter reading for the display lighted by the overhead lights. (Assume f/4 at 1/50th second.)

Set arrow to GN 160. Under f/4 read 40 FEET. This is the flash to subject distance for a 1:1 ratio. Obviously it is too great. Now, suppose further that at 10 feet you get just what you want in the finder. Set f/4 to 10 FEET. Under GN 160 read X 16. This would be the neutral filter to use over the lens of the flash for a 1:1 ratio at 10 feet.

Note that the arrow now points to GN 40. Set X3 to GN 40. Under GN 160 read X 48. Therefore: shooting from 10 feet with an aperture of f/4 the filter to be used over the flash head is X 48 for a 3:1 ratio.

multiple flash lighting

A rule of thumb procedure for 1:1 multiple flash lighting with identical flash units is: —

If two flash units have their light superimposed on the subject from the same position (side by side), use one f/stop less exposure than that calculated for one unit. If one unit is at 45 degrees, use ½ stop less. If individually they illuminate different areas of the subject, expose as for one flash unit.

Problem: How can I secure a 3:1 lighting ratio when using two identical flash units in a multiple lighting set-up?

Data: Guide No. 40: Desired aperture, f/8. Two identical flash units, one used as the "main" light, the other as fill-in light: 45 degree lighting: 3:1 ratio desired.

Solution: To solve this problem involving 45 degree lighting the figures on the "R" scale are altered by mentally subtracting 1 from the desired ratio. Thus for a ratio of 3:1 instead of setting R 3 to the guide number R 2 is used.

Set arrow to GN 40. Under f/8 read five FEET. ("main" light) Set R 2 (for a ratio of 3:1) to GN 40. Under f/8 read seven FEET. Thus, for a 3:1 ratio using 45 degree lighting the "main" light should be at five feet from the subject and the fill-in light at seven feet when using two identical units.

a "tricky" problem

Problem: Are the flash filters usable outdoors?

Data: Flash Guide No. 80: highlight-to-shadow ratio desired: 3:1. Flash on camera: camera at six feet.

Solution: Determine a normal daylight exposure for the highlights. (Assume the aperture called for is f/8.)

Set f/8 over six FEET. Over arrow read GN 48. Under GN 80 read X 3.

Flash filters are usable outdoors.

In the above problem a ratio of 3:1 would require the flash head to be at 17½ feet from the subject if a filter is not used. For a 1:1 ratio, the flash head would be at 10 feet from the subject when not using a filter. Working at 6 feet from the subject with a 3X filter still gives a ratio of 1:1 because the use

of the filter has changed the guide number to 48.

Therefore, to get a ratio of 3:1 at six feet: Set X 3 under GN 48. Under GN 80 read X 9 — the proper filter for a 3:1 ratio at six feet without altering the daylight exposure.

maintaining image size

Problem: How can I maintain the same image size when changing from a specific focal length to a lens of different focal length?

Data: 50mm lens: 90mm lens: 135mm lens: GN 55.

Solution: 50mm lens. (Assume the correct image size is at five feet.) Set 50mm (arrow) to GN 55. Over five FEET read f/11.

90mm lens.

Set F 90 to GN 55. Under f/11 read nine FEET.

135mm lens.

Set F 135 to GN 55. Under f/11 read 13½ FEET.

Thus, we see that, if a 50mm lens gives unwanted image size at five feet, changing to a 90mm lens requires this lens be nine feet from the subject and the 135mm lens 13½ feet for the same image size.

copying and close-up

Problem: How can I make a quick check for exposure factor (exposure increase) when doing close-up photography?

Data: 90mm tube used directly on the camera in connection with a 90mm lens.

Solution: Substitute *millimeters* for Guide No. and *exposure factor* for ratio on the calculator scales.

Add tube length and focal length (90mm + 90mm = 180mm, or, total extension). Set arrow to 180mm (GN scale). Under 90mm (GN scale) read exposure factor 4 (R scale). A four-times increase in exposure is required when using the above combination. (A 50mm lens with 90mm tube would equal 140mm on the GN scale and, read under 50 on the GN scale, would show a factor of 8 on the R scale. And so on.)

diameter of lens

Problem: How can I determine the diameter of a given lens aperture?

Data: 50mm lens stopped down to f/11.

Solution: Substitute *focal length* for Guide No. and *millimeters* for feet.

Set arrow to focal length 50mm (GN scale). Under f/11 read 4½mm (FEET scale). 50mm lens at f/11 would have a diameter of 4½mm.

As you become thoroughly familiar with the calculator you will, no doubt, find ways to use it to solve problems not covered in this article.

It is my earnest hope that you will find the calculator a helpful addition to your photographic equipment, as I have.

try a change of pace / John Schumacher

fast films can produce quality

A peculiar thing happens to us at times. For years we listen to the sound advice of the people who know the answers, then we go about doing the opposite. Perhaps it's because we need a change of pace to keep interest stimulated and alive. And sometimes, by breaking the rules, we find new answers to old questions.

We know that the slow, fine-grain films bring about the best results for the reproduction of close-up photographs. So, it might sound foolish for me to suggest that high speed (supposedly grainy) film would better suit the case. But I have found, by applying proper techniques, that results can be attained that will surpass fine grain film in many respects.

All the photographs that are used in this article were made with Tri-X film rated at 1200 ASA in daylight. I am not attempting to pat myself on the back, but merely trying to illustrate that high speed film can give highly satisfactory results. It will also make the taking of close-up pictures easier, and offer much more leeway in this sometimes-trying phase of photography.

High speed film offers more latitude under more existing-light conditions. But what about resolution? What about that old black beast, *graininess*? But, before going into that, I would like to discuss some of the drawbacks that are connected with slow, fine-grain films.

shorter exposures

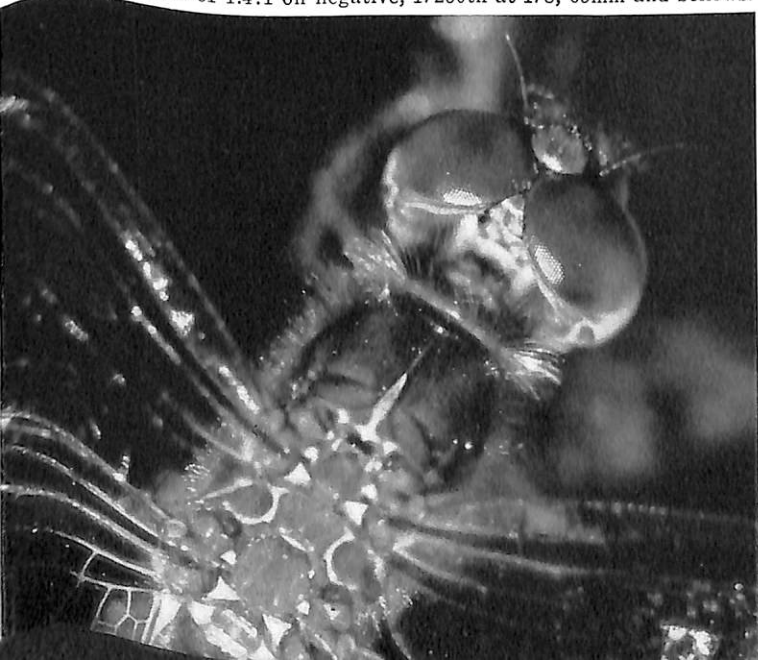
Exposure becomes rather a problem when we start extending the normal focal distance of a lens. For instance, we must increase the normal exposure four times if we are to reproduce an image equal to the object size (a ratio of 1:1). This means an increase of either two whole aperture stops, or four times the shutter speed. With ASA indexes between 20 and 200 we will find that, without strong direct sunlight or supplemental light sources, our shutter speeds and lens openings become difficult to work with.

If we could remedy this exposure problem and at the same time keep grain from being objectionable we would have a very pleasant situation. Developing high speed film in certain developers in dilution will just about satisfy this condition. With intensity readings around 50 on the Weston meter scale, a film speed of 1200 ASA and an exposure factor of 4X, a basic exposure of f/16 at 1/250th, for instance, becomes 1/250th at f/8 — hardly a handicap. Under similar conditions, a slower film (even one with a respectable 80 rating) would require f/8 at 1/15th. With less light or a greater ratio of reproduction, exposure time would become unwieldy with the slower film.

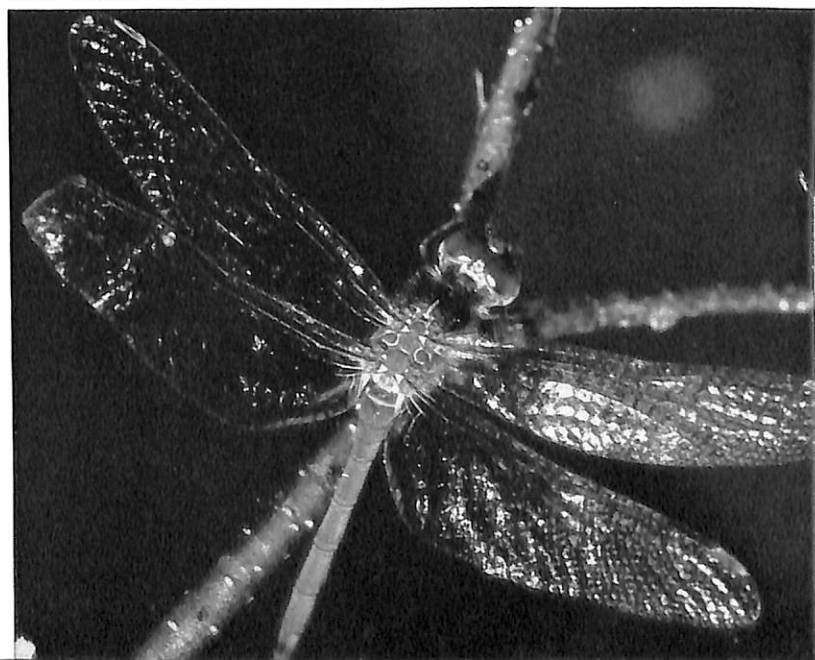
minimum vibration

We know that vibration is especially hazardous when

RATIO of 1.4:1 on negative, 1/250th at f/8, 65mm and bellows.



TRI-X and Acufine diluted 3:1 are author's standard.





REFLECTORS with 110W bulbs, 1/125th at f/5.6.

magnification on the negative is involved (ratios larger than 1:1). It becomes more and more of a problem as image-to-object ratio decreases. And, along with vibration, we have to contend with object movement. Short exposures reduce these hazards proportionately. This, in itself, is a great recommendation for high-speed film. Another is the increased depth of field offered by the use of the smaller apertures required by fast films.

And now for problem of grain. But is it a real problem? You will notice that there seems to be no

objectionable grain in the prints pictured. There is good acutance. And resolution, as far as the eye can discern, is quite adequate. (Half-tone reproduction has, of course, reduced the quality of the original prints. . . . Ed.) I have no special secret. I use Acufine developer diluted 3:1. Careful, *correct* exposure is important, though. Overexposure harms image quality.

Another problem often met with in close-up photography is "reciprocity failure." For instance: we attain the same effective exposure at 1/50th sec.

at $f/8$ as we do at $1/25$ th sec. at $f/11$. Most of the time, equal exposures result when the shutter speed is increased or decreased in the same proportion that the aperture is increased or decreased. But this law of reciprocity fails during very short or very long exposures. As a rule of thumb, the slower the film speed, the more acute this problem becomes. As you can see, the extra-long exposures encountered in close-up work can be shortened by the use of film with great speed and latitude. ASA ratings of 1200 will help to eliminate the chance of reciprocity failure. For instance: using $f/11$ with light intensity of 100 on the Weston meter and an exposure factor of 64x we will have a shutter speed of $1/4$ th of a second. This is still well within the boundaries of normal film response. But an ASA 40 film would require eight full seconds — with corresponding reciprocity failure problems.

Regardless of the speed of your film, however, there are several good close-up practices to observe. Use a tripod whenever you can, even when your shutter speed is $1/500$ th. If you can retract the mirror in your reflex housing prior to tripping the shutter, by all means do so; it helps avoid internal vibration. To minimize the chance of object movement, use the highest shutter speed possible. Exposure, of course, should be right on the button. Learn to use your meter properly (Leica Photography No.

4, 1960) and then make several bracketed exposures of each picture. Learn as much as possible about ratio of reproduction. Along with exposure factors, many other useful close-up data can be attained through the manipulation of this simple arithmetical function (Leica Photography No. 2, 1962). Distance between lens and object, exposure factor, depth of field can all be computed by using the ratio of reproduction.

Commercial developing, done in a good laboratory, will bring good results; but home processing is necessary to get the best quality the film has to offer. Let's face it. No one but *you* is going to give your films the individual attention they need to be at their best.

I dilute 12 ozs. of water to 4 ozs. of Acufine working solution and develop for 19 min. at 70 deg. F. in a tank that holds 16 ozs. of solution. Agitation is by inversion for five seconds every minute and a half. An enlarger of the condenser-diffuser type will give the necessary sharpness to your prints. Number three grade paper gives about average contrast for the mean density of negatives using the procedures in this article. In enlarging, a grain-focusing device is really necessary for really sharp results.

Try breaking the old "rules" for picture quality the next time you shoot some close-ups. Or other pictures, for that matter. I think you'll discover a few pleasures the rules may have denied you — and get good pictures in the bargain!

DIFFUSED SUNLIGHT, $1/250$ th at $f/16$, 65mm Elmar.





OFFICERS are responsible for club's continuing appeal to members. C. Owen Clayberg, (rear, center) is currently President.



SLIDE JUDGING utilizes home-designed and -made judging machine developed by Harold Burns, the club's 1st Vice President.

the Leica clubs—back again

In the early days of 35mm photography the Leica Club was a common photographic phenomenon. All the members were Leica owners and had grouped together to exchange techniques, discuss pictures and in general get more fun out of their favorite camera by pooling common interests. There were many Leica clubs both here and abroad.

World War II saw most of the American Leica clubs disbanded, but recently we have learned of what may be the start of a whole new group. This postwar club is a pioneer, as far as we know. It is the Arizona Leica Club Number One, of Phoenix. A while back, Leica-toting members of the Saguaro Camera Club of Phoenix decided it would be nice to form a group whose photographic interests were concentrated on their specialty. A year or more of discussion led finally to the formation of Arizona Leica Club Number One.

The first step — mailing out invitations to those who would be interested in such a club — was taken with the aid of a Franchised Leica Dealer and of Leica owners, who provided the names of prospective members. Response was good; membership now includes everything from beginners to professionals, with advanced hobbyists well represented.

The club is now a little over a year old according to its president (and one of its founders) Owen Clayberg. And its vitality is typified by a monthly bulletin "The Leica View Finder." This publication carries news, reports of meetings, personal items on the activities of members, items on Leica technique and in general emanates enthusiasm for photography which goes far toward keeping a club active.

Club programs include field trips, comparison demonstrations of the characteristics of various color films, slide competitions, taped slide shows, and so on. One of the areas of emphasis, in this era of the

color transparency, is the proper presentation of slide shows — titles, background music, sound effects and narration. There are also workshops in both color and black and white photography.

As was mentioned, long planning went into the formation of Arizona Leica Club Number One. Take the "Number One," for instance. It is in the name because the club limits itself to 50 members. And this is because a group this size or smaller works together better than a larger one. The "Number One" thus leaves the way open for the formation of Club Number Two, and so on, as interest in membership grows. Even the masthead of the club's bulletin and letterhead are designed to be adapted easily for use by other, similar clubs. The masthead or letterhead can easily be changed to read "Wisconsin Leica Club, Number Three," for instance, without affecting the general appearance of the publication.

To give the club peak service value, new members are asked to fill out questionnaires about their backgrounds, special interests and the equipment they are using. This helps the officers to plan programs and workshops which best meet the members' interests.

The success of Arizona Leica Club Number One is evidence of its value to members and their enthusiasm for it. And so we suspect that there may be other groups of Leica owners who would like to form a Leica club, but who don't know just where to start.

So, Arizona Leica Club Number One has offered to let us share its experience in organizing a group of Leicamen for their mutual enjoyment of photography.

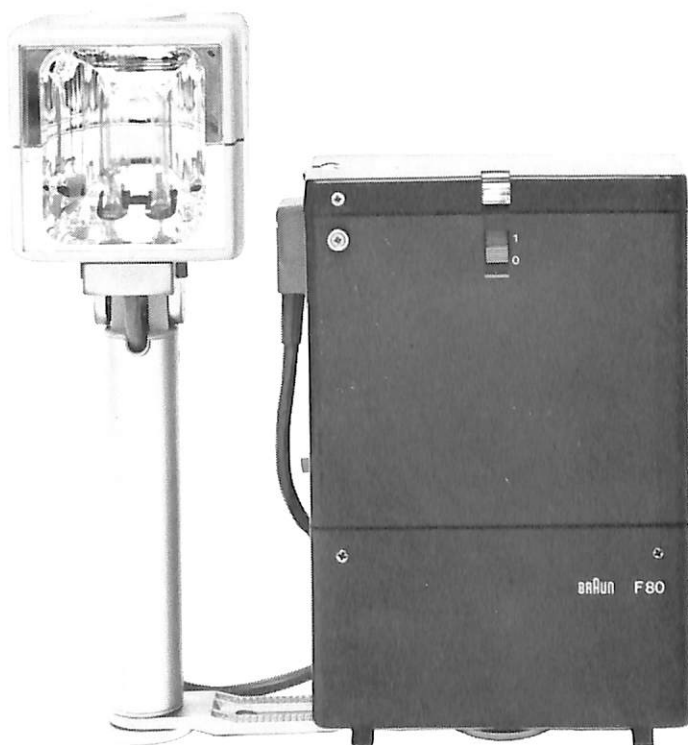
A copy of the club's constitution and of the questionnaire given to new members can be had by writing to the Editor, Leica Photography, c/o E. Leitz, Inc. 468 Park Avenue South, New York 16, New York.

3 NEW BRAUN FLASH SYSTEMS each with multiple power sources



NEW F-65...Amazingly light, despite its high guide number (5-oz. head; 26-oz. pack with built-in charger). Like the F-21, it has a 3-way power system; 8-sec. recycle on N.C. batteries, 10-sec. on A.C., and 4-sec. on A.C. plus N.C. Convenient removable head. GUIDE NUMBER: Kodachrome II—56.

NEW F-21...About the size of 2 cigarette packs, it has 3-way power: nickel-cadmium battery; A.C. only; or N.C. plus A.C. Fast recycling: 8 sec. with N.C. and an amazing 4 sec. with A.C. plus N.C. (Battery charges during A.C. use.) New reflector maintains 80° wide angle, but increases light; eliminates ultraviolet. GUIDE NUMBER: Kodachrome II—40.



NEW PROFESSIONAL F-80...The latest addition to the Braun line, F-80 is so versatile it's virtually a self-contained studio system. Revolutionary variable beam width, "hemispheric" head tilts 90°; rotates through 360°. Instantly interchangeable power packs: wet cell, N.C. battery and A.C. Full or half-power operation permits doubling number of flashes per charge (from 150 to 300 on wet cells; from 180 to 360 on N.C.). Recycling: 6 sec. on battery or A.C.; only 2 sec. at half-power. Accepts up to 3 extra "hemispheric" heads for extension work. GUIDE NUMBER: Kodachrome II—104.

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